

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A method for stabilizing a colorless solubilized phenyl phosphate comprising contacting the solubilized phenyl phosphate with a stabilizing amount of charcoal and retaining the charcoal in contact with the solubilized phenyl phosphate to provide a stabilized, solubilized phenyl phosphate having a background absorbance of less than about 0.1 at 405 nm and an activity of about 0.2 OD/min.
2. (Currently amended) The method of claim 1, wherein the solubilized phenyl phosphate is paranitrophenyl phosphate.
3. (Original) The method of claim 2, wherein the solubilized paranitrophenyl phosphate is in an aqueous buffered solution having a pH of greater than approximately 9.0.
4. (Original) The method of claim 2, wherein the solubilized paranitrophenyl phosphate comprises ≤ 3.0 g/L paranitrophenyl phosphate.
5. (Original) The method of claim 2, wherein the solubilized paranitrophenyl phosphate comprises approximately 1.0 to 3.0 g/L paranitrophenyl phosphate.
6. (Original) The method of claim 1, wherein the stabilizing amount of charcoal is an amount of approximately 5 to 15 mg/mL.
7. (Original) The method of claim 6, wherein the stabilizing amount of charcoal is an amount of approximately 10 mg/mL.

8. (Original) The method of claim 1, wherein the charcoal is activated charcoal.

9 -21. (Canceled)

22. (Currently amended) A stabilized, solubilized phenyl phosphate comprising (a) a solution comprising phenyl phosphate in a buffer, a ~~phenyl phosphate~~ wherein the solution has not previously been colored due to non-enzymatic hydrolysis, and (b) a stabilizing amount of charcoal, wherein the stabilized, solubilized phenyl phosphate has a background absorbance of less than about 0.1 at 405 nm and an activity of about 0.2 OD/min.

23. (Original) The stabilized, solubilized phenyl phosphate of claim 22, wherein the phenyl phosphate is paranitrophenyl phosphate.

24. (Original) The stabilized, solubilized phenyl phosphate of claim 23, wherein the charcoal is activated charcoal.

25. (Original) The stabilized, solubilized phenyl phosphate of claim 23, wherein the paranitrophenyl phosphate is in an amount of approximately 1.0 to 3.0 g/L.

26. (Original) The stabilized, solubilized phenyl phosphate of claim 22, wherein the phenyl phosphate is a Na^+ salt, a NH_4^+ salt, a Mg^{+2} salt or an isomer of a phenyl phosphate.

27. (Original) The stabilized, solubilized phenyl phosphate of claim 23, wherein the buffer is a basic buffer.

28. (Original) The stabilized, solubilized phenyl phosphate of claim 27, wherein the basic buffer is DEA, BIS-TRIS, TRIS, AMP, or AMPD.

29. (Original) The stabilized, solubilized phenyl phosphate of claim 22, further comprising a magnesium compound.

30. (Currently amended) A ready-to-use enzyme substrate composition comprising colorless solubilized phenyl phosphate, a buffer, and charcoal.

31. (Original) The ready-to-use enzyme substrate composition of claim 30, wherein the phenyl phosphate is paranitrophenyl phosphate.

32. (Original) The ready-to-use enzyme substrate composition of claim 30, wherein the charcoal is present in an amount of approximately 5 mg/mL to 15 mg/mL.

33. (Original) The ready-to-use enzyme substrate composition of claim 32, wherein the charcoal is present in an amount of approximately 10 mg/mL.

34. (Original) The ready-to-use enzyme substrate composition of claim 31, wherein the enzyme substrate is paranitrophenyl phosphate in an amount of approximately 1.0 g/L to 3.0 g/L.

35. (Original) The ready-to-use enzyme substrate composition of claim 34, wherein the paranitrophenyl phosphate is present in an amount of approximately 1.5 g/L.

36. (Currently amended) A reagent kit for an enzyme activity assay comprising separately an enzyme and the ready-to-use enzyme substrate composition of claim 31 ~~and an enzyme~~.

37. (Original) The reagent kit of claim 31, wherein the enzyme is alkaline phosphatase or acid phosphatase.

38. (Currently amended) A method of preparing an aqueous liquid substrate system used in phosphatase enzyme determination comprising:

- (a) solubilizing a phenyl phosphate in an aqueous buffered solvent to provide a colorless phenyl phosphate solution;
- (b) adding a magnesium compound to the colorless phenyl phosphate solution;
- (c) contacting the colorless phenyl phosphate solution with a stabilizing amount of charcoal;
- (d) retaining the magnesium compound and the charcoal in the colorless phenyl phosphate solution; and
- (e) ~~[[d]]~~ sealing the mixture solution.

39. (Original) The method of claim 38, wherein the phenyl phosphate is paranitrophenyl phosphate.

40. (Canceled)

41. (Currently amended) A vessel for containing a colorless solubilized phenyl phosphate in a basic buffer, wherein the vessel comprises charcoal on the surface of the vessel exposed to the solubilized phenyl phosphate.

42. (Original) The vessel of claim 41, wherein the phenyl phosphate is paranitrophenyl phosphate.

43 – 47. (Canceled)

48. (New) A method for stabilizing a solubilized phenyl phosphate which has been colored due to non-enzymatic hydrolysis comprising contacting the solubilized phenyl phosphate with a stabilizing amount of charcoal and retaining the charcoal in contact with the solubilized phenyl phosphate to provide a stabilized, solubilized phenyl phosphate having a background absorbance of less than about 0.1 at 405 nm and an activity of about 0.2 OD/min for 30 days or more in light at room temperature.

49. (New) The method of claim 48, wherein the solubilized phenyl phosphate is paranitrophenyl phosphate.

50. (New) The method of claim 49, wherein the solubilized paranitrophenyl phosphate is in an aqueous buffered solution having a pH of greater than approximately 9.0.

51. (New) The method of claim 49, wherein the solubilized paranitrophenyl phosphate comprises ≤ 3.0 g/L paranitrophenyl phosphate.

52. (New) The method of claim 49, wherein the solubilized paranitrophenyl phosphate comprises approximately 1.0 to 3.0 g/L paranitrophenyl phosphate.

53. (New) The method of claim 48, wherein the stabilizing amount of charcoal is an amount of approximately 5 to 15 mg/mL.

54. (New) The method of claim 6, wherein the stabilizing amount of charcoal is an amount of approximately 10 mg/mL.

55. (New) The method of claim 48, wherein the charcoal is activated charcoal.

56. (New) A stabilized, solubilized phenyl phosphate comprising (a) a solution comprising phenyl phosphate in a buffer, wherein the solution has previously been colored due to non-enzymatic hydrolysis, and (b) a stabilizing amount of charcoal, wherein the stabilized, solubilized phenyl phosphate has a background absorbance of less than about 0.1 at 405 nm and an activity of about 0.2 OD/min for 30 days or more in light at room temperature.

57. (New) The stabilized, solubilized phenyl phosphate of claim 56, wherein the phenyl phosphate is paranitrophenyl phosphate.

58. (New) The stabilized, solubilized phenyl phosphate of claim 56, wherein the charcoal is activated charcoal.

59. (New) The stabilized, solubilized phenyl phosphate of claim 57, wherein the paranitrophenyl phosphate is in an amount of approximately 1.0 to 3.0 g/L.

60. (New) The stabilized, solubilized phenyl phosphate of claim 56, wherein the phenyl phosphate is a Na^+ salt, a NH_4^+ salt, a Mg^{+2} salt or an isomer of a phenyl phosphate.

61. (New) The stabilized, solubilized phenyl phosphate of claim 57, wherein the buffer is a basic buffer.

62. (New) The stabilized, solubilized phenyl phosphate of claim 61, wherein the basic buffer is DEA, BIS-TRIS, TRIS, AMP, or AMPD.

63. (New) The stabilized, solubilized phenyl phosphate of claim 56, further comprising a magnesium compound.